## IN THE ABSTRACT

Please substitute the following Abstract for the Abstract presently in the application:

## ABSTRACT OF THE DISCLOSURE

An A/D converter converts the signal received by an array antenna and frequencyconverted to a digital signal by a frequency converter. A correlation detector uses the
chip rate as a cycle frequency and calculates a cyclic correlation matrix of spread
spectrum signals stored in data storage. A cycle frequency detector detects the cycle
frequency of an interference signal output from A/D converter. A correlation detector
uses the detection result of the cycle frequency detector as a cycle frequency and
calculates a cyclic correlation matrix of the signal, which becomes an interference signal,
using the signal output from A/D converter. A direction of arrival is estimated, using the
cyclic correlation matrices calculated by correlation detector and the correlation detector
calculates the respective eigenvalues and eigenvectors and estimates the directions of
arrival of a spread spectrum signal and a signal, which becomes an interference signal.